

WHAT IS CLAIMED IS :

1. A high-frequency semiconductor device comprising:

a ground plate provided on a semiconductor substrate;

a plurality of line conductors provided on said ground plate, forming a multiple layer structure with interlayer insulation films intervening therebetween that is composed of a resin insulating material;

a pad provided on most upper one of said interlayer insulation films; and

a groove provided in said most upper one of said interlayer insulation films and between said pad and said line conductor on said most upper one of said interlayer insulation films.

2. A high-frequency semiconductor device as set forth in claim 1, wherein said groove is disposed to surround said pad.

3. A high-frequency semiconductor device as set forth in claim 1, wherein said groove is partially disposed in a region between said pad and said line conductor on said most upper one of said interlayer insulation films.

4. A high-frequency semiconductor device as set forth in claim 3, wherein said pad is disposed in a peripheral region along an edge of said semiconductor substrate, and said groove is partially disposed in a region on said semiconductor substrate except said peripheral region.

5. A high-frequency semiconductor device as set forth in claim 3, wherein a plurality of said grooves are provided in said most upper one of said interlayer insulation films.

6. A high-frequency semiconductor device as set forth in claim 1, comprising a through-hole provided in said most upper one of said interlayer insulation films on which said pad is provided, and said pad being connected to a potential via said through-hole.

7. A high-frequency semiconductor device as set forth in claim 1 includes a line conductor connected to said pad on said most upper one of said interlayer insulation films, and wherein

said groove is provided in a region except a connection portion for said line conductor connected to said pad passing therethrough.

8. A high-frequency semiconductor device as set forth in claim 1, wherein said groove is provided to have a ring shape within said semiconductor substrate, and said pad is provided on said most upper one of said interlayer insulation films outside said ring shaped groove.

9. A high-frequency semiconductor device as set forth in claim 1, wherein said interlayer insulation film is composed of a polyimide or benzocyclobutene.